

What is Claimed is:

1. An anode with a 2450MHz resonance frequency comprising:

a cylindrical anode body with an inside diameter in a range of 32.5 to 34.0mm;

a total of ten vanes fitted to an inside circumferential surface of the anode body in a

5 radial direction; and

an inner strap and an outer strap provided to both of an upper surface and a lower surface of each vane, a distance of the inner strap and the outer strap being in a range of 0.8 to 1.2mm, and each of the inner strap and outer strap being in contact with every second vanes for electrical connection of the vanes alternately.

10

2. The anode as claimed in claim 1, wherein the anode body and vanes are formed as one unit for simplification of a fabrication process.

3. The anode as claimed in claim 1, wherein the anode body and vanes have the same

15 thickness.

4. A magnetron with an energy efficiency of higher than 70% comprising:

an anode with a 2450MHz resonance frequency including;

a cylindrical anode body with an inside diameter ranging 32.5 ~ 34.0mm, a total of

20 ten vanes fitted to an inside circumferential surface of the anode body in a radial direction,

and an inner strap and an outer strap provided to both of an upper surface and a lower surface

of the vanes, a distance of the inner strap and the outer strap being in a range of 0.8 to 1.2mm,

and each of the inner strap and the outer strap being in contact with every second vanes for

electrical connection of the vanes alternately;

an antenna attached to one of the vanes for transmitting a high frequency energy generated at the anode body to an exterior; and

a helical filament in an inner central part of the anode.

5

5. The magnetron as claimed in claim 4, wherein the anode body and vanes are formed as one unit for simplification of a fabrication process.

---

6. The magnetron as claimed in claim 4, wherein the anode body and vanes have the  
10 same thickness.